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12.3.8.8

SPILL PREVENTION CONTROL AND
COUNTERMEASURES (SPCC) PLAN

Ash Grove Cement Company
3801 East Marginal Way South
Seattle, Washington 98134

Clayton Project No. 75-03217.00
March 16, 2004

Prepared for:
ASH GROVE CEMENT COMPANY
Seattle, Washington

Prepared by:
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SPCC PLAN CERTIFICATION AND REVIEW PAGE

I hereby certify that I have examined the facilities, and being familiar with the provisions of Title 40 CFR, Part 112, attest that this plan has been prepared in accordance with good engineering practices and the applicable SPCC regulation and that it is adequate for this facility.

Professional Engineer: Michael Zimmerman, P.E.

Registration Number: Washington 39305

Company: Clayton Group Services

Signature: _____

Date: _____

This plan has the full approval of management at a level of authority to commit the necessary resources to implement this plan.

Ash Grove Cement Company Representative: Craig Puljan

Title: Plant Manager

Signature: _____

Date: _____

PROPOSED SCHEDULE FOR MODIFICATIONS

This facility has proposed to complete the following projects according to the schedule shown below, which will ensure the site is in compliance with the SPCC Plan requirements of 40 CFR 112.7.

The Professional Engineer signed and certified the SPCC Plan with the expectation that the implementation schedule would be adhered to and completed as proposed. The list and schedule below include a location for the facility representative(s) to sign as each project is completed.

Project	Scheduled Date of Completion	Signature and Date Completed (Note 1)
1. There is inadequate containment capacity present for the 350-Gallon Hydraulic Dock Crane Reservoir. The current capacity of the containment pan below the tank is 175 gallons. **The containment capacity of the unit's spill pan should be increased to a minimum of 385 gallons. Additionally, a concrete (or other material) berm should be constructed along the riverbank in order to contain any release of fluid from the hydraulic lines from discharging directly to surface waters.**	Within 180 days after management approves this SPCC.	_____ (Signature) _____ (Date)
2. The facility maintains a 300-Gallon Portable Fuel aboveground storage tank. This tank is single-walled and may be moved around the facility as needed. Storage of this tank is prohibited within 250 feet of the waterfront, near the storm drains at the Clinker Storage silos and the truck wash rack decant basin. Water from these drains does not pass through the oil/water separator before being discharged. **The Facility should replace the tank with a new AST that incorporates double wall construction.**		

Note 1.By signing here, I certify that the work was completed on the date noted, and it was performed as proposed by the Professional Engineer at the time this SPCC Plan was signed and certified.

DESIGNATED PERSONS ACCOUNTABLE FOR OIL SPILL PREVENTION

The following person is accountable for oil spill prevention at this Facility and this person has reviewed this SPCC Plan, is familiar with and is responsible for implementing the requirements of this SPCC Plan.

- Craig Puljan, Plant Manager

MANAGEMENT APPROVAL ACKNOWLEDGEMENT

I am familiar with the requirements included in this SPCC Plan and acknowledge that this SPCC Plan will be implemented as described herein with full management approval. In addition, I have reviewed and certified the Substantial Harm Determination Form in Appendix B, which exempts this Facility from having to prepare and submit a Facility Response Plan to the United States Environmental Protection Agency Regional Administrator.

Ash Grove Technologies Representative: Craig Puljan
Print Name

Signature: _____

Title: Plant Manager

Date: _____

SPCC PLAN REVIEW AND AMENDMENT LOG

Revision Made	Page Section Number	Date	Initials	P.E. Certification Necessary?
				Yes / No
				Yes / No
				Yes / No
				Yes / No
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1.0 INTRODUCTION

This Spill Prevention Control and Countermeasure (SPCC) Plan establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil into or upon the navigable waters of the United States (U.S.) or adjoining shorelines for the Ash Grove Cement Company facility (Ash Grove), located at 3801 East Marginal Way South in Seattle Washington (the Facility).

This SPCC Plan was prepared in accordance with the regulations of Title 40 of the Code of Federal Regulations, Part 112.7 (40 CFR 112.7) and any other applicable section of 40 CFR Part 112. This SPCC Plan meets the requirements in the revised regulations that were effective on August 16, 2002. A cross-reference of applicable regulatory requirements and the locations where they are discussed in this SPCC Plan is provided in Appendix A.

This SPCC Plan is a carefully thought-out plan, prepared in accordance with good engineering practices, and which has the full approval of management at a level of authority to commit the necessary resources. A signed Management Approval Acknowledgement as required in 40 CFR 112.7 is found at the front of this SPCC Plan. In accordance with 40 CFR 112.3(d), this Plan includes a Professional Engineer's review and certification at the front of this Plan. Ash Grove's designated person(s) accountable for oil spill prevention and reporting to line management is (are) identified at the front of this SPCC Plan.

This SPCC Plan, and the implementation thereof, is designed to complement existing laws, regulations, rules, standards, policies and procedures pertaining to safety standards, fire prevention and pollution prevention rules, so as to form a comprehensive balanced federal/state spill prevention program to minimize the potential for oil discharges. The Facility will continue to comply with other Federal, State or local laws.

1.1 APPLICABILITY

The Ash Grove Facility is considered a non-transportation-related onshore facility. Due to its location, the Facility could reasonably be expected to discharge oil into or upon the navigable waters of the U.S. or adjoining shorelines. This determination was based solely on geographic and location aspects of the Facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.), and excludes consideration of man-made features such as dikes, equipment or other structures that serve to prevent an oil discharge from reaching navigable waters of the U.S. or adjoining shorelines.

The Facility's aboveground storage capacity is greater than 1,320 gallons of oil. Consequently, the Facility is required to develop, implement, and maintain a SPCC Plan under 40 CFR 112.1(a), (b), (d), and (e). Per 40 CFR 112.1(d)(2)(ii), only containers with a capacity of 55 gallons or greater are counted in the calculation of the Facility's aboveground storage capacity. Containers with a capacity less than 55 gallons are exempt from all SPCC requirements and thus not covered in this Plan.

Sufficient equipment or structures are available to prevent discharged oil from reaching navigable waters or adjoining shorelines. Therefore, an oil spill contingency plan as described in 40 CFR 109 is not required or included in this SPCC Plan, and 40 CFR 112.7(d) of the SPCC regulations does not apply to the Facility.

1.2 SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN LOCATIONS

The Facility is attended at least four hours a day; therefore, a copy of the SPCC Plan is maintained at the Facility and is available to the U.S. Environmental Protection Agency Regional Administrator (USEPA RA) for onsite review in the following location(s):

- Plant Management Office

1.3 CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

The Oil Pollution Prevention regulation of 1990 (OPA 90), originally promulgated under the Clean Water Act, directs facilities that could cause substantial harm to the environment by discharging oil into navigable waters of the U.S. to prepare and submit a Facility Response Plan for responding to a worst case discharge of oil and to a substantial threat of such a discharge. Under 40 CFR 112, Appendix C, facilities that do not meet the substantial harm criteria are not required to maintain a Facility Response Plan; however, they must document and maintain their determination as part of their SPCC Plan. The Facility does not meet the substantial harm criteria; therefore, it is not required to maintain a Facility Response Plan under 40 CFR 112.20. A Substantial Harm Determination Form for the Facility is provided in Appendix B.

2.0 FACILITY INFORMATION

2.1 NAME AND ADDRESS OF FACILITY AND OWNER

Facility Name:	Ash Grove Cement Company
Street Address:	3801 East Marginal Way South, Seattle, Washington 98134
Owner:	Ash Grove Cement Company
Person in Charge of Oil Spill Prevention:	Mr. Gerald Brown Safety/Environmental Manager
Site Description:	The site consists of 23 acres bordered on the north and south by Port of Seattle facilities, on the east by Stoneway Concrete, and on the west by the Duwamish River. The majority of the site is either paved or covered by buildings, although some unpaved areas exist near the barge unloading area.

Facility Description: The facility is a cement manufacturing plant. In these operations, the facility uses hydraulic oils in a variety of equipment and diesel fuel for vehicles. Additionally, used oil is stored on site.

Operations History: The Ash Grove Company has operated the facility since 1984.

Oil Storage and Use Locations: Oil and petroleum products are handled and stored in the facility at the locations identified in Table 1.

The Facility is located in Seattle, King County, Washington. Figure 1 is a 1:24,000 scale USGS topographic map that shows the Facility and the area within at least a ¼ mile of the Facility boundary. The surface water body nearest to the Facility is the Duwamish River, which forms the western property boundary of the Facility.

2.2 FACILITY DESCRIPTION

The Ash Grove facility in Seattle, Washington is a manufacturing plant that produces Portland cement. The facility is located on a 23-acre site in an area of industrial development. Raw materials are unloaded from barges on the Duwamish River (located along the western edge of the plant). The raw materials include sources of oxides of calcium, silicon, aluminum and iron. The sources used at this plant are limestone, silica rock, clay and iron scale. The selected materials are proportioned to give the desired chemistry prior to being ground and dried. This material is then homogenized and fed to the kiln. The kiln system is fed the dry material through a series of cyclones that preheat the feed with exhaust gasses before it is introduced to the kiln. Inside the kiln, the raw feed is heated to 2,800 degrees Fahrenheit and the reaction of the individual components into calcium silicate nodules is completed. This material is called clinker. The clinker is then milled and stored in silos or in a dome prior to distribution via rail or truck. The kilns are fired by coal, tires and natural gas.

The facility operates 24 hours per day, seven days a week. The operation capacity is 750,000 tons of cement clinker per year. The facility and the operations are depicted in Figure 2.

There is no stormwater discharge from this facility into the bordering waterway (Duwamish River). Storm water from the plant passes through an oil/water separator and an underground retention tank before being discharged into the Metro/King County storm drain. Water from the truck wash area is diverted into an oil/water separator prior to discharge into the Metro combined sewer system.

2.3 OIL STORAGE AND HANDLING LOCATIONS

Table 1 summarizes the oil containers, tanks or vessels, contents, and volumes present at the Facility at the time of the SPCC Plan's certification. The locations of the containers, tanks or vessels are shown in Figure 2.

2.3.1 Oil-Filled Ancillary Equipment

Ash Grove is only responsible for compliance under the SPCC regulations for any transformers onsite that the Facility owns and operates. Ash Grove is not responsible for compliance under the SPCC regulations for any transformers onsite that are owned and operated by the local utility, Seattle City Light.

Ash Grove owns or operates nine oil-filled electrical transformers onsite that are subject to the requirements of 40 CFR 112 (Figure 2). Table 1 includes details on the locations, size and contents of these units.

2.3.2 Other Oil Storage Containers

The Facility does not maintain any portable oil storage tanks onsite, except for the 300-gallon portable diesel AST.

The Facility does maintain portable oil storage containers of 55 gallons or less onsite. Table 1 includes details on the locations, size and contents of these containers.

Absorbent spill response materials are stored at various locations onsite. Spill response materials are used to respond to hazardous material spills at the Facility, and would therefore be used to contain a spill of portable oil containers.

2.3.3 Oil Transfer Piping

There are no underground or aboveground pipes at the Ash Grove facility that are used to convey petroleum products except for short lengths of dispenser piping used to dispense fuel to vehicles. During such times, all petroleum handling systems will be visually inspected. *Any deficiencies will be immediately noted in the inspection records maintained in Appendix D,* ***and corrective actions initiated.*** Pressure testing of the piping systems is not expected to be necessary but could be performed if warranted. The above ground diesel tanks and dispenser pipes are protected from damage by vehicular traffic by being placed away from normal vehicle traffic, or by placement of bollards around the equipment.

2.3.4 Oil Transfers

The bulk diesel and hydraulic oil tanks are filled via commercial diesel fuel vendors from bulk tank trucks. Ash Grove personnel will escort the tanker trucks to the site of refill and will observe the tanker operator filling the diesel tanks. Ash Grove requires the vendor to bring their own spill containment materials, however, in the case of a catastrophic release, Ash Grove would make its spill containment materials available and

assist as needed to control any oil release. Facility personnel would also be present when the fuel tanks are emptied to replace old fuel. In case of a spill during loading and unloading operations, vendor and/or Ash Grove personnel should immediately notify the Control Room according to Plant Emergency Notification Procedures can respond quickly to minimize the quantity that is spilled and can readily contact additional Ash Grove personnel if further assistance is needed.

It is not expected that transformers would need to be totally filled during use. If they are to be topped-off, the oil is received in 5-gallon containers. Any releases, would therefore, be limited to 5-gallons or less and could easily be contained. If a transformer completely looses dielectric fluid, they would likely fail necessitating their replacement.

2.3.5 Internal Heating Coils

There are no tanks with internal heating coils at the Facility. Therefore, the internal heating coil requirements of 40 CFR 112.8(c)(7) do not apply to this Facility.

2.4 SPILL HISTORY

The Facility did have one reportable oil spill during the 12-month period prior to the review and certification of this SPCC Plan. According to Mr. Gerald Brown, Ash Grove Safety and Health Manager, approximately 2-gallons of diesel fuel were released via a hole in a filter during a barge offloading process. Mr. Brown stated that the fuel spilled onto sand that was carried on the barge and was discharged with accumulated rainwater. According to Mr. Brown, the incident was reported to the Washington state Department of Ecology and the US Coast Guard.

2.5 REASONABLE POTENTIAL FOR EQUIPMENT FAILURES

Table 3 includes scenarios and areas that present a reasonable potential for equipment failure (such as an overflow, rupture, or leakage) resulting in a potential spill at the Facility. These scenarios include a prediction of the direction, rate of flow, and total quantity of oil that could be discharged from the Facility as a result of each major type of failure.

3.0 SPILL PREVENTION, CONTROL AND COUNTERMEASURES

The Facility uses a combination of engineering and design controls as well as operational procedures to minimize the potential release of oil. In the event of a release, sufficient containment or adequate control measures are provided to prevent releases from reaching navigable waters or adjoining shorelines.

The Facility is an onshore facility with bulk oil storage. The following SPCC Regulations do not apply to the Facility:

- 40 CFR 112.9 - Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities;

- 40 CFR 112.10 - Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities;

- 40 CFR 112.11 - Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities; and,

- 40 CFR 112.12 - Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities). Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels.

3.1 ENGINEERING AND DESIGN CONTROLS

3.1.1 Secondary Containment Design

All oil storage tanks and containers are provided with appropriate containment and diversionary structures or equipment to prevent discharged oil from reaching navigable waters. The containment systems are capable of containing oil and are constructed to be sufficiently impervious so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs.

Ash Grove will contain and cleanup small spills. For large spills, the Facility will either call 911 or an outside spill response contractor depending on the nature of the release. A potential oil release could be contained within the Facility, even if it occurred during a 25-year, 24-hour storm event, if not by the secondary containment at the source, then by the use of spill response equipment.

3.1.1.1. Secondary Containment Design for ASTs

Adequate secondary containment is provided for the aboveground storage tanks (ASTs) and containers as described below:

- **1,000-Gallon Diesel Fuel Storage Tank-** A concrete containment completely impounds the tank (labeled Item A on Figure 2). The volume of the containment is 30,890 gallons.

- **350-Gallon Hydraulic Dock Crane Reservoir**- The tank (labeled Item C on Figure 2) is mounted above the crane's power unit and spill pan. The pan is designed to contain any leaks in the tank and pump unit, and has a capacity of 175 gallons. A 10-inch fluid level sight gauge is provided to monitor any changes in fluid levels within the tank. The system is designed to automatically shut down whenever a loss of tank volume is detected by a side-mounted liquid level switch. *In order to be incompliance with current regulations, the containment capacity of the unit's spill pan should be increased to a minimum of 385 gallons. Additionally, a concrete (or other material) berm should be constructed along the riverbank in order to contain any release of fluid from the hydraulic lines.* As of

the date of this report, Ash Grove is in the process of incorporating new containment features with regards to this area.

- **Raw Mill Hydraulic Reservoir**- The reservoir (labeled Item D on Figure 2) is located inside the Raw Mill building. The building, its concrete floors, and its walls provide adequate containment for this tank. Additional containment consists of a blind sump located in center of the room.

- **600-Gallon Used Oil ASTs-** The used oil tanks (labeled Item E on Figure 2) are located at the southwest corner of the preheating tower. The two 600-gallon aboveground tanks are used to store used oil collected from within the plant from lubrication of site machinery. A concrete containment structure completely surrounds the area. The containment volume is 1,137-gallons and should be sufficient to contain a release from one the largest tank in the area as required by the SPCC regulations.

- **300-Gallon Portable Fuel AST-** The portable storage AST is used for the transport of diesel fuel to site locations as needed. The tank may be taken by forklift truck to site locations for the purpose of refueling equipment, such as front end loader, etc. Storage of this tank is prohibited within 250 feet of the waterfront, near the storm drains at the Clinker Storage silos and the truck wash rack decant basin. Water from these drains does not pass through the oil/water separator before being discharged. *At this time, the tank design does not incorporate secondary containment features. The Facility plans on replacing the tank with a new AST that incorporates double wall construction.* As of the date of this report, Ash Grove is in the process of incorporating new containment features with regards to this area.

- **Square Tanks & Drums in Burner Building-** Containers of hydraulic and lubricating oils stored inside the Burner Building and are generally maintained on a concrete floor. The building, its concrete floors, and its walls provide adequate containment for these tanks.

- **Diesel Emergency Generator With 400-Gallon AST-** One diesel generator with a 400-gallon diesel fuel AST (labeled Item I on Figure 2) is located to the south of the clinker storage building. The generator is situated under cover within the building. A blind sump is located near the AST and would collect any spilled material thus preventing a discharge outside of the building to a nearby storm drain.

3.1.1.2. Secondary Containment Design for Buried Tanks

There are no buried tanks present at the Facility that contain oil.

3.1.1.3. Secondary Containment Design for Oil-Filled Ancillary Equipment

Transformers are located throughout the Facility. Generally, the transformers are located on concrete pads within fence areas that are kept locked. The concrete pads are typically surrounded by an asphalt surface used for parking or vehicular traffic. Typically, transformers are adjacent to the buildings but are not covered by a roof.

Transformers typically used in industrial applications do not have engineered secondary containment systems (such as integral curbs). Because of their weight, however, they are usually placed on concrete pads that serve to contain small leaks that would be the most commonly expected type of release. Because transformers are critical elements in the power delivery system, any major loss of oil-based dielectric fluid would occur simultaneously with power problems. In addition, transformers are typically in or near personnel foot or vehicle traffic areas so releases would likely be observed when they are small. Therefore facility personnel are expected to be able to observe and respond to oil releases from transformers in a manner to protect the waters of the United States. Furthermore, the hydrophobic and oleophilic booms around the transformers will allow rainwater to pass while absorbing and forming a dike to contain releases of transformer oils.

These existing containment measures are believed to be adequate, however, because a complete and sudden release of oil from transformers is unlikely. In addition, the transformer malfunction resulting from loss of dielectric fluid would be obvious through loss of power and/or change in power quality. The oil release would be observed and controlled before oil would overflow and be released to storm drains or impact the waters of the United States

3.1.1.4. Secondary Containment Design for Portable Containers

Most of the portable containers are stored indoors or in areas that are sufficiently impervious, act as secondary containment and would contains a potential release for the largest container stored in the area. The buildings, their concrete floors and their walls provide adequate containment for the portable containers. Alternatively, any releases from portable containers currently stored outdoors can be expected to flow towards storm drains that ultimately discharges into the Facility's oil/water separator.

3.1.2 Tank and Pipe Construction

The tanks are specifically designed to handle petroleum fuels such as diesel and are compatible with the contents/materials stored and conditions of storage such as pressure and temperature. These tanks are also designed to withstand a variety of hazards, including impact resistance for the ASTs. The bulk storage tank installations include secondary means of containment as discussed in Section 3.1.1.

- **1000-Gallon Fuel Storage Tank**- The tank construction consists of ¼ inch ASTM A-36 steel with rolled heads. The 1,000-gallon capacity tank is filled and vented through 1-1/2 inch ports. A stick gauge is used to measure the amount of

fuel in the tank. An associated dispensing pump, equipped with an automatic shut off nozzle, is located within the concrete containment. The pump's operating controls are locked when not in use.

- **350-Gallon Hydraulic Dock Crane Reservoir-** The receiving dock crane is an electrically powered, hydraulically operated "A" Frame Breast Derrick. The associated hydraulic reservoir is a 350-gallon capacity horizontal AST designed to contain Chevron AW ISO 32 Hydraulic Fluid. A 10-inch fluid level sight gauge is provided to monitor any changes in fluid levels within the tank. The system is designed to automatically shut down whenever a loss of tank volume is detected by a side mounted liquid level switch. Hydraulic lines for the operation of the winches consist of 2-inch Schedule 80 PVC pipe that runs from the reservoir, underneath the dock, to the winches. Soft piping is used to connect the pipe with hard lines at the control valves and the hoist winch on the dock and on the shore boom winch.

- **The Raw Mill Hydraulic Reservoir**- The reservoir consists of a 374-gallon steel tank containing Chevron AW ISO 68 Hydraulic Fluid. A site gauge is provided to monitor any changes in fluid levels within the tank.

- **600-Gallon Used Oil ASTs-** The construction of the two tanks consists of welded 1/4 –inch stainless steel with a removable top. The tanks are filled and vented through a 9-inch diameter opening in the top. A stick gauge is used to measure the amount of oil in the tank.

3.1.3 Construction of Oil Filled Electrical Equipment

- The transformers are constructed of steel and were built to meet the electrical industry standards to prevent releases of oil and safe use of the equipment;

- Transformers #3 through #8 are situated within a concrete berm that would contain any releases of oils. With the exception of Transformer # 1 (located on the 2nd floor of the coal mill).the remaining equipment (Transformers #2 and #9) are installed on concrete pads that will help contain potential oil releases onsite; and,

- In the event that there was a significant oil release from the electrical equipment, the equipment would eventually shutdown power and would immediately alert company staff to correct the oil release issue.

3.1.4 Design of Filling Areas

Diesel fuel is received by truck delivery and off-loaded into the AST by the delivery personnel. Delivery personnel are required to attend the controls at all times during the off loading process. Each delivery truck is required to carry spill absorbent material for immediate response and cleanup of any spill occurring on site. Additional cleanup material is located in the adjacent Old Raw Mill Building, and maintained for immediate

use. Procedures for diesel fuel transfer operations and spill response protocols are posted at the tank location for quick reference by plant personnel.

Fuel is transferred into the 300-Gallon Portable Fuel AST from the 1,000-Gallon Diesel Storage Tank (Item A, Figure 2), then transported to the remote site by the forklift operator. The operator is prohibited from leaving the transfer process unattended.

3.1.5 Drainage Design

The oil storage and handling locations at the Facility are constructed to control drainage and prevent oil spills from being released offsite, or are constructed with built-in secondary containment. The Facility is graded to drain towards various storm drains located throughout the Facility.

Figure 2 indicates the surface drainage patterns at the facility. Bulk fuel storage is contained by integral double-walled tank construction or by concrete berms that serve as secondary containment devices. All other locations store only small quantities of petroleum-based materials. Such materials are generally handled inside the building or within asphalt or concrete areas outside. Any such releases can be quickly and effectively contained to a small local area and will be cleaned up as soon as possible.

A small release from a transformer would typically be contained on the concrete transformer pad. In the event of a release of transformer fluids, absorbent materials may be placed around the base of the transformer or directly under the leak to contain the release. Transformer #1 is located on the 2nd floor of the Coal Mill Building. Areas around all transformers are bermed and graded so that runoff flows into storm drains that discharge into the Facility's oil/water separator.

3.1.6 Overall Facility Drainage

The portion of the facility where industrial activity occurs is nearly entirely covered with concrete and asphalt paving, with the exception of landscaped areas. The facility drainage system has been designed and constructed according to accepted engineering practices to channel storm water sheet flow and run off into storm water sewers. The facility is not expected to be subject to periodic flooding, and release prevention measures for flooding are not required.

The storm water from the facility is collected and discharged to a 2,715- gallon retention tank and oil water separator prior to discharge into the municipal stormwater system.

3.1.7 Tank Containment Drainage

Drainage from transformers – The outdoor transformer pads are open and will be exposed to rain. Transformers #3 through #8 are situated within a concrete berm that would contain any releases of oils. With the exception of Transformer # 1 (located on the 2nd floor of the coal mill) the remaining equipment (Transformers #2 and #9) are installed

on concrete pads that will help contain potential oil releases onsite. The concrete berm containment areas do not have drain valves but are drained via portable pumps.

Drainage from undiked areas - Drainage from undiked areas will be localized and flow to the nearest storm drain. Any oil spills would likewise flow to onsite storm drains only if the integral secondary containment structure were breached. Virgin materials may also be stored outside of secondary containment pallets before use. These oil containers are equipped with factory sealed threaded drainage fittings, and must be manually opened. Any spill or leak from a container would probably be able to be contained locally due to the small volume of the oil containers. Accordingly, appropriate personnel are trained in spill management procedures. Spill containment equipment such as oil absorbent is readily available for use in case of incidental releases.

3.1.8 Security Design Features

Chain-link fencing and security gates enclose the Facility. Access into the Facility is available through a gate at the entrance. There is adequate lighting in the oil handling areas that allows detection of spills or releases both by operating personnel and by non-operating personnel, such as the general public or local police, and prevention of spills occurring through acts of vandalism.

3.1.9 Emergency Response Equipment Storage Locations

The Facility maintains emergency response equipment (absorbents, brooms, and shovels) onsite to respond to spills of oil and other hazardous materials. The locations of the equipment are depicted on the Facility Map.

3.2 OPERATIONAL PROCEDURES

3.2.1 Secondary Containment Inspections

Secondary containment structures are visually inspected routinely to ensure they have integrity to contain any leaks (Section 4.2). Ash Grove personnel will promptly correct any visible oil leaks that result in a loss of oil from tank seams, gaskets, rivets, and bolts sufficiently large to cause the accumulation of material in secondary containment areas.

Ash Grove Production Department Staff or Maintenance Department Staff will notice a release during tank inspections or during site walkthroughs. If an employee, contractor, or Security identifies any emergency that requires assistance from outside the immediate workplace, then he or she will start internal notifications as identified in Section 4.1.1.

3.2.2 Tank and Pipe Procedures

3.2.2.1. Inspections of ASTs

Ash Grove Production Department Staff or Maintenance Department Staff will perform routine inspection of areas associated with oil storage on a designated schedule on a

monthly basis. The system is maintained in accordance with plant preventive maintenance programs, which include periodic inspection of the containment for cracks or other damage. Defects affecting the integrity of the containment will be remedied immediately.

Facility container inspections comply with the requirements in the Federal (SPCC) regulations:

- SPCC Requirement [40 CFR 112.8(c)(6)]: *Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skidmounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.* **To meet the "periodic integrity testing" requirement, Ash Grove monitors the following:**

- To meet the "frequent observation" requirement, monthly inspections are performed of the ASTs, containment areas (if present), including stick gauges on the single-walled tanks, secondary containment berms around the 1,000-Gallon Diesel Fuel Storage AST and the two 600-Gallon Used Oil AST as well as the areas below the other miscellaneous storage units.

Ash Grove will perform periodic integrity testing of the metal ASTs every ten years, or sooner if a release into the secondary containment tank occurs. This will include:

- A leak test rating that meets the standards specified for aboveground tanks (or in their absence the standards specified for underground tanks).

- Documentation of these tank integrity tests; and,

- Maintenance of comparison records for tank testing.

Per 40 CFR 112.7(e), the Facility may use usual and customary business records to serve as a record of tests or inspections, instead of keeping duplicate records for the SPCC Plan. These inspections are documented in the Facility inspection log sheets that are maintained onsite. The inspections and tests are conducted in accordance with written procedures developed by the Facility or by the Professional Engineer that certified the Plan.

Facility personnel frequently observe tanks during operating hours. Formal inspections are conducted by the Facility following the schedule in the Facility Inspection Report and

Checklist (Appendix C). These include observations of the outside of each tank for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside containment and diked areas and around the down-grade storm drain catch basins. The personnel also observe the tank supports and foundations.

The Facility does not own, operate, or maintain field-constructed aboveground containers. Therefore, the brittle fracture inspection or evaluation requirements in 40 CFR 112.7(i) do not apply to the Facility.

3.2.2.2. Inspections of Underground (Buried) Storage Tanks

The Facility does not operate any buried or underground storage tanks (USTs) that contain oil. Therefore, the requirements of leak testing in 40 CFR 112.7(e)(2)(iv) and (v) do not apply to the Facility.

3.2.2.3. Procedures for Pipes

The Facility implements the following procedures for oil pipes:

- Pipelines that are not in use for extended periods of time (six months or more) are capped or blind flanged and marked as to their origin.

- Aboveground valves and pipelines are regularly examined by operating personnel following the schedule in Table 5 and the guidelines in Appendix D. The general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are assessed or examined to detect leaks and potential equipment failures.

- Periodic pressure testing may be warranted for piping in areas where Facility drainage is such that a failure might lead to an outdoor release spill event. The drainage in these areas is designed so that a piping failure would not lead to a spill event.

- Vehicular traffic granted entry into the Facility in areas of oil storage/handling is not required to be verbally warned, because the system design is not vulnerable to vehicle traffic. The pipes are not located over roadways, and traffic barriers are located in front of tanks in asphalt areas to protect them from possible vehicle contact.

3.2.3 Oil Transfer Procedures

The Facility does not maintain a tank car and tank truck loading/unloading rack; therefore, the operational procedure requirements in 40 CFR 112.7(h) do not apply.

There is no truck loading/unloading rack at the Ash Grove facility to handle petroleum materials and therefore the provisions of 40 CFR 112.7(e)(4) do not apply.

Bulk Storage Tanks- The bulk diesel and hydraulic oil tanks are filled via commercial diesel fuel vendors from bulk tank trucks. Ash Grove personnel will escort the tanker trucks to the site of refill and will observe the tanker operator filling the diesel tanks. Ash Grove requires the vendor to bring their own spill containment materials, however, in the case of a catastrophic release, Ash Grove would make its spill containment materials available and assist as needed to control any oil release. Facility personnel would also be present when the fuel tanks are emptied to replace old fuel. In case of a spill during loading and unloading operations, vendor and/or Ash Grove personnel should immediately notify the Control Room according to Plant Emergency Notification Procedures can respond quickly to minimize the quantity that is spilled and can readily contact additional Ash Grove personnel if further assistance is needed.

All of the tank trucks and loading/unloading procedures meet the minimum requirements and regulations established by the U.S. Department of Transportation (U.S. DOT). Storage tank filling operations are performed to ensure that a tank is not overfilled. Prior to departure of any tank truck, the lowermost drain and all outlets of such vehicles are closely examined for leaks, and if necessary, tightened, adjusted, or replaced to prevent liquid leaks while in transit.

Transfer/Pumping Operations for Other Petroleum Materials- Various lubricants and other petroleum products are delivered to the site in 55-gallon drums or smaller containers. Waste oils, if generated, will be placed directly into 55-gallon drums or other appropriately sized containers. Virgin lubricant and waste oil containers will be kept on impervious surfaces such as concrete and asphalt.

Facility personnel will be present and/or have direct control over lube oil dispensing and use and waste oil-draining operations. Spill cleanup materials are staged in the area for use by facility personnel. In case of a spill during such operations, facility or contract maintenance personnel can respond quickly to minimize the quantity of oil that is spilled.

It is not expected that transformers would need to be totally filled during use. If they are to be topped-off, the oil is received in 5-gallon containers. Any releases, would therefore, be limited to 5-gallons or less and could easily be contained. If a transformer completely looses dielectric fluid, they would likely fail necessitating their replacement.

3.2.4 Drainage Procedures

The portion of the facility where industrial activity occurs is nearly entirely covered with concrete and asphalt paving, with the exception of landscaped areas. The facility drainage system has been designed and constructed according to accepted engineering practices to channel storm water sheet flow and run off into storm water sewers. The facility is not expected to be subject to periodic flooding, and release prevention measures for flooding are not required.

The storm water from the facility is collected and discharged to a 2,715-Gallon retention tank and oil water separator prior to discharge into the municipal stormwater system.

The Facility does manage oils outdoors where rainwater may accumulate and drainage release procedures in 40 CFR 112.8(c)(3) do apply to the following pieces of equipment:

- Two of the Facility's seven transformers are located outdoors and will be exposed to rainwater. The two exposed units are not surrounded by any containment features, however, any spills would flow towards storm drains that lead to the oil/water separator. Seven of the units are located indoors and will not be exposed to rainwater.
- The 1,000-Gallon Diesel Fuel Storage AST is surrounded by a 30,890-gallon secondary containment that should be adequate to collect rainwater.
- The 400-Gallon Diesel Emergency Generator AST is surrounded by a 500-gallon secondary containment and is located indoors and; therefore, is not exposed to rainwater.
- The 350-Gallon Dock Crane Hydraulic Reservoir is situated above a 175-gallon spill pan that should be adequate to collect rainwater.

3.2.4.1. Rainwater Inspection Procedures

If rainwater accumulates in an area onsite that has the potential to be impacted by the oil containers described in this Plan, and there is an oil sheen or a small amount of floating oil is observed, the water may be discharged into the Facility's 2,715- gallon retention tank and oil water separator prior to discharge into the municipal stormwater system.

3.2.4.2. Spill Procedure to Prevent Release from Flowing Offsite Through the Facility Storm Drainage System

The Facility operates an oil/water separator system in conjunction with its storm drain system. Any spills or released liquids of any type would travel through the oil/water separator prior to being discharged into the Metro stormwater system. The Facility maintains spill cleanup kits and absorbents onsite to respond to minor releases.

3.2.5 Security Procedures

The Facility is in operation and is staffed 24 hours a day, seven days a week. Therefore, there are always Production Department Staff or Maintenance Department Staff operational staff onsite to detect of spills or releases and deter spills occurring through acts of vandalism.

The starter control on fuel pumps are locked in the "off" position or located at a site accessible only to authorized personnel when the pumps are in a non-operating or non-standby status.

4.0 ADMINISTRATIVE REQUIREMENTS

4.1 SPILL NOTIFICATION, REPORTING, AND RESPONSE REQUIREMENTS

A list of Emergency Contacts such as the agencies to be contacted in the event of an emergency is included in Appendix F. Appendix F is meant for reference use only.

4.1.1 Internal Notification

If an oil spill occurs, the Control Room must be notified and will respond according to the Plant Emergency Notification Procedures outlined in Appendix F.

When notified of an on-site emergency, Production Control will:

1. Request emergency assistance from the appropriate agency (911 or Spill Response) and provide the following needed information:
   - Identify yourself, (name & title)
   - Identify plant address: Ash Grove Cement Company
3801 East Marginal Way South
Seattle, WA
Plant Telephone Number: 206.623.5596
   - Identify the type and nature of the emergency.
   - Instruct the responding personnel that an escort will meet the emergency vehicles at the main entrance
   - Identify the exact location of the spill
   - Provide any additional information regarding the emergency (Fire, chemical spill or release, identity of materials involved and estimated quantities, etc.).
   - After the emergency personnel leave the site, complete the Master Reporting Form provided in Appendix D.

4.1.2 External Agency Notification

The 24-hour emergency contact phone numbers for the agencies are included in Appendix F. Individual agencies have specific spill notification and reporting requirements that would apply if a release of oil occurred at the Facility.

Federal, State and local agency notification and reporting requirements for unauthorized oil releases are included in Appendix G. For example, a release of 42 gallons or more of oil to water or that threatens waters of the state (to a storm drain) is a reportable release.

4.2 INSPECTIONS

The Facility Inspection Report and Checklist (Appendix C) includes an outline of the required SPCC inspections and frequencies for the Facility. Section 3.2.1, Section 3.2.2

include more detailed information about the inspections performed at the Facility. Records of inspections and integrity testing will be retained as indicated in Section 4.4.3. If the inspections reveal any evidence of a release, record pertinent information in the Master Reporting Form provided as Appendix D.

4.3 PERSONNEL TRAINING

The personnel involved with the management and handling of oil and hazardous substances take part in periodic spill prevention and response training programs. The training program is an integral part of the facility's environmental training programs. The training will be conducted by an individual familiar with the SPCC Plan and will include the following topics:

- Introduction and Applicability
- Oil Spill Prevention Regulations
- Regulatory Requirements (training and trigger quantities)
- Spill Prevention, Control, and Countermeasures Plan
- Reporting Requirements
- Spill Prevention
- Facility-Specific SPCC Review
- Spill Response Training Drill (Tabletop Exercise)

The Facility is responsible for providing regulatory-related training to oil-handling personnel. Spill prevention briefings for oil-handling personnel are conducted when plant or response modifications and/or changes are made or implemented or when plans are amended, as identified in Section 4.4.1. The discharge prevention briefings are scheduled for oil-handling personnel at least once a year to assure adequate understanding of the Facility's SPCC Plan. Such briefings highlight and describe known discharges as described in 40 CFR 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

The training, at a minimum, trains oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general Facility operations; and, the contents of the Facility SPCC Plan. Attendance at SPCC-related training is documented on class attendance sheets. Records of SPCC Plan training will be retained as indicated in Section 4.4.3.

4.4 MAINTAINING THE SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

- The SPCC Plan is stamped and certified by a registered Professional Engineer at the front of this Plan;

- Management approval is necessary at a level that is authorized to commit necessary resources (Section 1.0);

- Copies of the SPCC Plan are maintained at the location(s) identified in Section 1.2;

- The SPCC Plan is reviewed at least every five years to determine if an amendment is necessary and the review is documented on the form at the front of this Plan (Sections 4.4.1 and 4.4.2);

- Ash Grove allows USEPA, Washington State Department of Ecology (Ecology), or local agency (such as the Fire Department) inspectors to come onsite and inspect the SPCC Plan, as directed by the regulations; and,

- As part of normal operations and this SPCC plan, the Facility has provisions for inspecting the site to prevent releases of oil to navigable waters, training personnel about the SPCC Plan, maintaining security of the site, and keeping records of such activities (Sections 4.2 and 4.3).

4.4.1 Spill Prevention Control and Countermeasure Plan Review and Amendment Requirements

The SPCC Plan must be amended whenever there is a change in Facility design, construction, operation, or maintenance, which materially affects the potential for the discharge of oil into or upon the navigable waters of the U.S. or adjoining shorelines. Such technical amendments shall be implemented as soon as possible, but not later than six months after such change occurs.

Facility modifications that could require a technical amendment are:

- Addition of new tanks;

- Addition of new process equipment;

- Addition of new truck or rail loading/unloading facilities;

- Modifications that would reduce secondary containment or the ability to contain spills; or,

- Any other changes in the Facility or its operations that affect the Facility's potential to discharge oil to navigable waters or adjoining shorelines. This includes administrative or procedural changes such as reducing inspections from those specified in this SPCC Plan.

Even if there are no such modifications, a review and evaluation of the SPCC Plan must be completed at least once every five years in accordance with 40 CFR 112.5(b). The

Facility will sign the statement at the front of this Plan as to whether it will amend the Plan to include the following:

- Such technology that will significantly reduce the likelihood of a spill event from the Facility as described in 40 CFR 112.1(b); and,

- Such technology that has been field proven at the time of review.

Any technical amendment to the SPCC Plan shall be certified by a Professional Engineer in accordance with 40 CFR Part 112.3(d) within six months after a change in the Facility design, construction, operation, or maintenance occurs which materially affects this Facility's potential for the discharge of oil into or upon the navigable waters of the United States or the adjoining shorelines.

A Professional Engineer certification is not required for non-technical amendments such as changes to phone numbers, names, etc. If the SPCC Plan does not require a technical amendment, the Facility operator/manager may sign and date the five-year review at the front of this Plan as indicated stating no technical amendment was necessary.

The most recent SPCC Plan review was conducted by Clayton Group Services and was certified as shown on the Professional Engineer Certification located at the front of this Plan.

4.4.2 Spill Prevention Control and Countermeasure Plan Review and Amendment Documentation

Each review or amendment to the SPCC Plan will be documented in the SPCC Plan Review and Amendment Log, which is found at the front of this SPCC Plan. Documentation should include the date and a summary of the review or amendment, the name and signature of the person(s) performing the review or amendment, and identification of the Plan section(s) affected.

4.4.3 Records

Records of inspections, signed by the appropriate inspector or supervisor, are part of this SPCC Plan. Records of all inspections are maintained onsite for a minimum of three years.

4.4.4 Reports to Agencies

There are no requirements in the Federal or State laws or regulations to submit this SPCC Plan to agencies. The SPCC Plan will be maintained onsite and made available to agency inspectors upon their request.

Potential reports to agencies include the following:

- Spill notification reports identified in Section 4.1

4.4.5 Agency Visits

The USEPA, Ecology, and local agencies are authorized to visit the Facility and inspect it and the SPCC Plan during normal working hours. If an agency representative visits the site, let them know they may perform the inspection, and contact the Site Manager and the representative in charge of this Plan to ask if they would like to be present during the agency visit.

TABLES

TABLE 1. SUMMARY OF OIL STORAGE/USE LOCATIONS

Container Description	Volume (Gallons)	Contents	Location	Comments
Fuel Storage AST	1000	Diesel	A	30,890 gallon containment
Dock Crane Hydraulic Reservoir and Hydraulic Lines	350	Hydraulic Oil	C	A 175-gallon spill pan is present below the hydraulic reservoir. **The containment capacity should be increased to a minimum of 385 gallons. Additionally, a concrete (or other material) berm should be constructed along the bank in order to contain any release of fluid from the hydraulic lines.**
Hydraulic Reservoir (Philadelphia)	374	Hydraulic Oil	D	Inside building. Containment consists of a blind sump located in center of the room.
Square Tank	740	Gear Oil	D	Inside building. Containment consists of a blind sump located in center of the room.
Drums (2)	55	Hydraulic Oil	D	Inside building. Containment consists of a blind sump located in center of the room.
Used Oil ASTs (2)	600 each	Used Oil	E	1137 gallon containment (To date, these ASTs have not been utilized by the facility)
Portable Fuel Tank	300	Diesel	F	No containment. Moved by forklift on/off nearby pier. **The AST should be replaced by a double-walled tank or tote designed to be lifted and transported on a regular basis.**
Square Tanks (4)	500 each	Hydraulic Oil	G	Inside building with no additional containment.
Drums (10)	55 each	Lubricants	G	Inside building. No additional containment
Lubricant Drums (6)	55 each	Lubricants	H	The unit is located inside the Kiln Pier #1 building. Any spills would be contained within the building.
Emergency Generator Diesel Tank	400	Diesel	I	500 gallon containment

TABLE 1. SUMMARY OF OIL STORAGE/USE LOCATIONS

Container Description	Volume (Gallons)	Contents	Location	Comments
Drums (2)	55 each	Used Antifreeze	K	No containment. **A concrete (or other) berm should be constructed around the area of drum storage.**
Drums (2)	55 each	Waste Oil	K	No containment. **A concrete (or other) berm should be constructed around the area of drum storage.**
Drum	55	Hydraulic Oil	K	No containment. **A concrete (or other) berm should be constructed around the area of drum storage.**
Square Tank	240	New Oil	K	Double-walled construction. Spill kits should be placed in the area in case of a minor spill during re-filling.
Square Tank	180	New Oil	K	Double-walled construction. Spill kits should be placed in the area in case of a minor spill during re-filling.
Transformer #1	240	Mineral Oil	2nd Level Coal Mill	No containment. Any spills would flow towards the east into a storm drain that leads to the oil/water separator.
Transformer #2	194	Silicone	Clinker Silo	The unit is located inside the Clinker Silo building. Any spills would be contained within the building.
Transformer #3	211	Silicone	Finish Mill	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.
Transformer #4	211	Silicone	Finish Mill	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.
Transformer #5	162	Silicone	Finish Mill	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.
Transformer #6	169	Mineral Oil	Finish Mill	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.
Transformer #7	169	Mineral Oil	Finish Mill	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.

TABLE 1. SUMMARY OF OIL STORAGE/USE LOCATIONS

Container Description	Volume (Gallons)	Contents	Location	Comments
Transformer #8	194	Silicone	Group II Silo	The unit is located inside a concrete-bermed area. Any spills would be contained within the berm.
Transformer #9	308	Mineral Oil	Between Change House & Pack House	No containment. Any spills would flow towards the south into a storm drain that leads to the oil/water separator.

TABLE 2 - POTENTIAL EQUIPMENT FAILURES

Potential Event	Equipment	Spill Direction	Estimated Potential Volume Released Minimum (Maximum)	Estimated Spill Rate
Complete failure of a full tank/container	Fuel Storage AST	Inside containment, or to storm drain system	50 gallons (1000 gallons)	10gpm to 20 gpm
	Dock Crane Hydraulic Reservoir and Hydraulic Lines	Into spill pan or onto ground, and if not immediately addressed, into the Duwamish River	50 gallons (350 gallons)	10 gpm to 20 gpm
	Hydraulic Reservoir (Philadelphia)	Within building	10 gallons (374 gallons)	Instantaneous
	Square Tank	Within building	100 gallons (740 gallons)	Instantaneous
	Drum	Within building	10 gallons (55 gallons)	10 gpm to 20 gpm
	Used oil ASTs (2)	Inside containment, or to storm drain system	10 gallons (600)	10 gpm to 20 gpm
	Portable Fuel Tank	Location dependent, onto ground	10 gallons (300 gallons)	10gpm to 20 gpm
	Square Tanks (4)	Within building	10 gallons (500 gallons)	10 gpm to 20 gpm
	Drums (10)	Within building	10 gallons (55 gallons)	10 gpm to 20 gpm
	Lubricant Drums	Within building	10 gallons (55 gallons)	10 gpm to 20 gpm
	Emergency Generator Diesel Tank	Inside containment, or to storm drain system	10 gallons (400 gallons)	10 gpm to 20 gpm

TABLE 2 - POTENTIAL EQUIPMENT FAILURES

Potential Event	Equipment	Spill Direction	Estimated Potential Volume Released Minimum (Maximum)	Estimated Spill Rate
Complete failure of a full tank/container	Drums (2)	ENE to storm drain system	10 gallons (110 gallons)	10 gpm to 20 gpm
	Drums (2)	ENE to storm drain system	10 gallons (110 gallons)	10 gpm to 20 gpm
	Drum	ENE to storm drain system	10 gallons (55 gallons)	10 gpm to 20 gpm
	Square Tank	ENE to storm drain system	10 gallons (240 gallons)	10 gpm to 20 gpm
	Square Tank	ENE to storm drain system	10 gallons (180 gallons)	10 gpm to 20 gpm
	Transformer #1	ESE to storm drain system	10 gallons (240 gallons)	0.1 to 1 gpm
	Transformer #2	Within Clinker Silo Building	10 gallons (194 gallons)	0.1 to 1 gpm
	Transformer #3	Within concrete berm	10 gallons (211 gallons)	0.1 to 1 gpm
	Transformer #4	Within concrete berm	10 gallons (211 gallons)	0.1 to 1 gpm
	Transformer #5	Within concrete berm	10 gallons (162 gallons)	0.1 to 1 gpm
	Transformer #6	Within concrete berm	10 gallons (169 gallons)	0.1 to 1 gpm
	Transformer #7	Within concrete berm	10 gallons (169 gallons)	0.1 to 1 gpm
	Transformer #8	Within concrete berm	10 gallons (194 gallons)	0.1 to 1 gpm
	Transformer #9	South to storm drain system then to oil/water separator	10 gallons (308 gallons)	0.1 to 1 gpm

TABLE 2 - POTENTIAL EQUIPMENT FAILURES

Potential Event	Equipment	Spill Direction	Estimated Potential Volume Released Minimum (Maximum)	Estimated Spill Rate
Container overfill	Fuel Storage AST	Inside containment, or to storm drain system	0.1 gallon (5 gallons)	Gradual loss – could be detected and stopped
	Grinding Aid AST	Inside containment	0.1 gallon (5 gallons)	Gradual loss – could be detected and stopped
	Dock Crane Hydraulic Reservoir	Into spill pan or onto ground	0.1 gallon (5 gallons)	Gradual loss – could be detected and stopped
	Hydraulic Reservoir (Philadelphia)	Within building	0.1 gallon (5 gallons)	Gradual loss – could be detected and stopped
	Square Tank	Within building	10 gallons (740)	10 gpm to 20 gpm
	Used oil ASTs (2)	Inside containment, or to storm drain system	10 gallons (1,200 gallons)	10 gpm to 20 gpm
	Used oil ASTs (2)	Inside containment, or to storm drain system	10 gallons (1,200)	10 gpm to 20 gpm
	Portable Fuel Tank	Location dependent, onto ground	10 gallons (300 gallons)	10 gpm to 20 gpm
	Portable Fuel Tank	Location dependent, onto ground	10 gallons (300)	10 gpm to 20 gpm
	Square Tanks (4)	Within building	10 gallons (2,000 gallons)	10 gpm to 20 gpm
	Square Tanks (4)	Within building	10 gallons (2,000)	10 gpm to 20 gpm
	Diesel Emergency Generator Tank	Inside containment, or to storm drain system	10 gallons (400 gallons)	10 gpm to 20 gpm
	Diesel Emergency Generator Tank	Inside containment, or to storm drain system	10 gallons (400)	10 gpm to 20 gpm

TABLE 2 - POTENTIAL EQUIPMENT FAILURES

Potential Event	Equipment	Spill Direction	Estimated Potential Volume Released Minimum (Maximum)	Estimated Spill Rate
Leaking pipe, valve, or fitting	Dock Crane Hydraulic Reservoir	Within containment pan. If unattended, into the Duwamish River	1 gallon (25 gallons)	0.1 gpm to 2.5 gpm
Container Unloading: Rupture or drop	Portable Fuel Tank	Location dependent, onto ground	1 gallon (365 gallons)	Gradual to instantaneous

FIGURES

APPENDIX A

SPCC PLAN REQUIREMENTS AND THEIR LOCATIONS

IN THIS SPCC PLAN

SPCC PLAN CROSS-REFERENCE AND COMPLETENESS CHECKLIST (UPDATED SEPTEMBER 2002)

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
Subpart A—Applicability, Definitions, and General Requirements For All Facilities and All Types of Oils		
§ 112.1 through 112.7		
112.1	General applicability establishing procedures, methods and equipment and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the US or adjoining shorelines.	1.0
112.3(a) - (c)	Requirements for preparation and implementation of SPCC Plans in accordance with 40 CFR 112.7 *and any other applicable section of 40 CFR 112.*	1.0
112.3(d)	Obtain Professional Engineer's review and certification. P.E. Certifies the SPCC Plan was prepared in accordance with good engineering practice, *including consideration of applicable industry standards*, and with the requirements of the SPCC rule.	Front of Plan, 1.0, and 4.4.1
112.3(e)	Maintain copy of SPCC Plan on-site if facility is *normally attended at least 4 hours per day*; otherwise, maintain it at nearest field office. Also, make Plan available to USEPA RA or other local agency inspector for on-site review during normal working hours.	1.2
112.4(a) - (c)	When discharge >1,000 gallons of oil in *a single discharge as described in 40 CFR 112.1(b), or (2) discharge more than 42 U.S. gallons of oil as described in 40 CFR 112.1(b), in each of two discharges within any 12-month period*, submit, within 60 days, a report to regional EPA and to *the state agency in charge of oil pollution control activities.* State Water Board.	4.1.2
112.5(a)	Amend SPCC Plan, within 6 months, whenever there is change in facility design, construction, operation or maintenance, which materially affects facility's potential for discharge.	4.4.1
112.5(b)	Perform a review and evaluation of SPCC Plan at least once *every five years. The owner/operator must document completion of the review and evaluation, and must sign a statement as to whether he will amend the SPCC Plan. The following will suffice: "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result."*	Front of Plan and 4.4.1

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.5(c)	Obtain Professional Engineer's certification for *any technical amendments* in accordance with 112.3(d).	4.4.1
§ 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans		
112.7	If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing.	Front of Plan
112.7	*If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:*	App. A – this checklist
112.7(a)(1)	Include a discussion of your facility's conformance with the requirements listed in 40 CFR 112.7.	1.0 and Tables 1 and 2

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.7(a)(2)	*Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2),112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).*	The whole Plan
112.7(a)(3)	Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. *The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:*	2.0 and Figures 1 and 2
	(i) The type of oil in each container and its storage capacity;	Table 1
	(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);	3.0 and 3.2.3
	(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;	Table 2
	(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);	3.0 and Table 2
112.7(a)(3) (continued)	*(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and*	3.2.4.1

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
	(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in § 112.1(b).	App. F
112.7(a)(4)	*Unless you have submitted a response plan under 40 CFR 112.20, provide information and procedures in your SPCC Plan to enable a person reporting a discharge to relate information on the exact address or location and phone number of the facility....*	4.1.1
112.7(a)(5)	*Unless you have submitted a response plan under 40 CFR 112.20, organize portions of the SPCC Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting materials as appendices.*	3.2.4.2
112.7(b)	Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.	2.5 and Table 2
112.7(c)(1)	Provide appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching navigable watercourse. *The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs.* At a minimum, include one of following preventive systems for onshore facilities:	3.1.1
	(i) Dikes, berms or retaining walls;	3.1.1
	(ii) Curbing;	3.1.1
	(iii) Culverts, gutters or other drainage;	NA
	(iv) Weirs, booms or other barriers;	NA
112.7(c)(1) (continued)	(v) Spill diversion ponds;	NA
	(vi) Retention ponds; and,	NA
	(vii) Sorbent materials.	NA

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.7(d)	When installation of structures or equipment, as outlined in 112.7(c) and (h)(1) and 40 CFR 112.8(c)(2), (c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2) and 112.14(c) is not practicable, *clearly explain why such measures are not practicable; for bulk storage containers, conduct periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping, unless you have submitted a response plan under 40 CFR 112.20 provide the following in your SPCC Plan:*	1.1 and 1.3
	1. Provide an oil spill contingency plan described in 40 CFR 109; and,	NA
	2. Provide a written commitment of manpower, equipment and materials to control and remove harmful quantity of oil discharged.	NA
112.7(e)	*Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*	3.2.1 and 3.2.2
112.7(f) Personnel, training, and discharge prevention procedures		
112.7(f)(1)	*At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.*	4.3
112.7(f)(2)	*Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.*	Front of Plan and 4.3
112.7(f)(3)	*Schedule and conduct discharge prevention briefings for your oil handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.*	4.3
112.7(g) Security (excluding oil production facilities)		
112.7(g)(1)	Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.	3.1.6

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.7(g)(2)	Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.	3.2.5
112.7(g)(3)	Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.	3.2.5
112.7(g)(4)	Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.	3.2.5
112.7(g)(5)	Provide facility lighting commensurate with the type and location of the facility that will assist in the: (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and (ii) Prevention of discharges occurring through acts of vandalism.	3.1.6
112.7(h) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities)		
112.7(h)(1)	*Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.*	NA
112.7(h)(2)	*Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.*	NA
112.7(h)(3)	*Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.*	3.2.3

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.7(i)	*If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.*	NA
112.7(j)	*In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.*	NA
Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)		
§ 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).		
112.8(a)	*Meet the general requirements for the Plan listed under 40 CFR 112.7, and the specific discharge prevention and containment procedures listed in this section (40 CFR 112.8).*	1.0 and 3.1.1
112.8(b) Facility Drainage (for onshore facilities, except oil production)		
112.8(b)(1)	Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.	NA –
112.8(b)(2)	Use valves of manual, open-and closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained storm water, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.	NA

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.8(b)(3)	Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.	NA 3.1.5
112.8(b)(4)	If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.	NA 3.1.6
112.8(b)(5)	Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.	NA
112.8(c) **Bulk Storage** *Containers* **(for onshore facilities, except oil production)**		
112.8(c)(1)	Do not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.	3.1.2
112.8(c)(1)	Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.	3.1.1 and Table 2
112.8(c)(3)	Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:	NA 3.2.4
	(i) Normally keep the bypass valve sealed closed.	3.2.4
	(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).	3.2.4
	(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and	3.2.4

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
	(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3).	3.2.4
112.8(c)(4)	Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.	NA 2.3.1.2
112.8(c)(5)	*Do not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.*	NA – 2.3.1.2
112.8(c)(6)	*Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried).*	3.2.2
	• *You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing.*	3.2.2.1
	• *You must keep comparison records and you must also inspect the container's supports and foundations.*	3.2.2.1
	• *In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas.*	3.2.2.1
	• *Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*	3.2.2.1
112.8(c)(7)	Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.	NA – 2.3.5
112.8(c)(8)	Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:	3.1.1

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
	(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.	3.1.1.1, 3.1.4, and 3.2.2.1
	(ii) High liquid level pump cutoff devices set to stop flow at a predetermined *container* content level.	NA
	(iii) Direct communication between tank gauger and pumping station.	NA
	(iv) Fast response system for determining liquid level of each bulk storage *container* such as digital computers, telepulse, or direct vision gauges. *If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.*	3.2.3
	(v) You must regularly test liquid level sensing devices to ensure proper operation.	3.2.2.1 and 3.2.2.2
112.8(c)(9)	Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).	NA
112.8(c)(10)	Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.	3.2.1
112.8(c)(11)	Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or *container with sufficient freeboard to contain precipitation.*	2.3.4, 3.1.1.2, and Table 2
112.8(d) Facility Transfer Operations, Pumping, and Facility Process (onshore facilities, except oil production)		
112.8(d)(1)	Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.	NA 3.2.2.3

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
112.8(d)(2)	Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.	NA 3.2.2.3
112.8(d)(3)	Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.	3.1.2
112.8(d)(4)	Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.	NA 3.2.2.3
112.8(d)(5)	Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.	NA 3.2.2.3

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS AND THEIR LOCATIONS IN THIS SPCC PLAN		
40 CFR Section	**Description**	**Location in this SPCC Plan**
Appendix C to Part 112	Appendix C to Part 112—Substantial Harm Criteria *Section 2.1 A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA.* Section 2.2 Any facility with a total oil storage capacity greater than or equal to 1 million gallons without secondary containment sufficiently large to contain the capacity of the largest aboveground oil storage tank within each area plus sufficient freeboard to allow for precipitation must submit a response plan to EPA. Secondary containment structures that meet the standard of good engineering practice for the purposes of this part include berms, dikes, retaining walls, curbing, culverts, gutters, or other drainage systems. Section 2.3 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility could cause injury (as defined at 40 CFR 112.2) to fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan. Facility owners or operators must determine the distance at which an oil spill could cause injury to fish and wildlife and sensitive environments using the appropriate formula presented in Attachment C-III to this appendix or a comparable formula. *Section 2.4 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c).*	1.3 and App. B

This SPCC Plan Cross-Reference and Completeness Checklist was completed for non-transportation related facilities. The following SPCC regulations do not apply to this facility:

40 CFR § 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities;

40 CFR § 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities;

40 CFR § 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities; and,

40 CFR § 112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities). Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels.

APPENDIX B

SUBSTANTIAL HARM DETERMINATION FORM

USEPA CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: Ash Grove Cement Company

Facility Address: 3801 East Marginal Way South, Seattle, Washington 98134

Does the *facility* transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42, 000 gallons?

YES ■ NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

YES ■ NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using an appropriate formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

YES ■ NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance as calculated using an appropriate formula such that a discharge from the facility would shut down a public drinking water intake or public water system?

YES ■ NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

YES ■ NO

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

	Plant Manager
Signature	Title
Craig Puljan	
Name (Printed)	Date

APPENDIX C

FACILITY INSPECTION REPORT AND CHECKLIST

FACILITY INSPECTION REPORT AND CHECKLIST

INSPECTOR: _____ DATE: _____ TIME:

Instructions: This check sheet is to be used during program review process of the SPCC.

	Drainage (Daily Schedule)	Comments
	No noticeable oil or sheen on runoff?	
	Containment area drainage valves are closed and locked?	
	No visible oil sheen in containment area?	
	No standing water in containment area?	
	Valves, flanges, and gaskets are free from leaks.	
	Containment walls are intact?	
	Oil-Filled Electrical Equipment (Monthly Schedule)	
	Equipment surfaces are checked for signs of leakage?	
	Equipment in good condition?	
	Bolts, rivets, or seams are not damaged?	
	Equipment foundation is intact?	
	Level gauges and alarms working properly?	
	Vents are not obstructed?	
	ASTs (Daily/Monthly Schedule)	
	Monthly- Tank surfaces (both primary and secondary) are checked for signs of leakage?	
	Monthly- Tank (both primary and secondary) in good condition?	
	Monthly- Bolts, rivets, or seams are not damaged?	
	Monthly- Tank foundation is intact?	
	Monthly- Level gauges and alarms working properly?	
	Daily-Vents are not obstructed?	
	Daily-Lighting is working properly?	
	Training (Annual Schedule)	
	Spill prevention briefing held?	
	Training records are in order?	

NOTES.

A "0" answer to any item will require corrective action. Initial and date the follow-up actions.
X=Satisfactory, N/A=Not Applicable: 0=Repair/Correction Necessary: C=See comment section

The inspections required by the SPCC Plan are conducted under several separate programs at the Facility. These inspection programs and the SPCC Plan areas they cover are listed below.

Issues Inspected	Frequency	Responsible Party
Drainage	Daily	
Aboveground storage tank (AST) Tank General	Daily/Monthly	
Site oil storage area and drainage areas	Monthly	
AST and UST Tanks mechanical	Annually	
Training	Annually	

APPENDIX D

MASTER REPORTING FORM

MASTER SPILL REPORTING FORM

Complete each section in detail for each agency called.

1. Number called _____ Agency _____
2. Details of the release or threatened release

Exact location _____

- Date _____
- Time _____
- Duration _____

3. Name of the person reporting to the Agency _____
4. Hazardous materials involved (chemical name) _____

- Is this material extremely hazardous? If it's diesel or transformer oil, the answer is no.

5. Estimate of the quantity of hazardous material involved _____ gallons/pounds (circle one)
6. Potential hazard presented by the hazardous material, if known _____
7. Medium or media impacted? Soil, storm drain, surface water, ground water? (circle one)
8. Description of what happened _____

_____

9. Proper precautions to take _____
10. Known or anticipated health risks _____
11. Name and phone number of a person at the Facility if the Agency needs more information

Name _____ Phone Number _____

AGC2H000456

APPENDIX E

FUEL TRANSFER/EQUIPMENT MONITORING PROCEEDURES

DIESEL TRANSFERRING PROCEDURES

Upon delivery of diesel fuel to be stored in the 1000-gallon tank, the company representative will meet and escort the delivery truck to the tank.

1. Prior to transferring the diesel to the tank the following action must be taken by the company representative:

   A. Inspect the tank for evidence of leaks or corrosion and the spill containment area for spills and cracks.

      1. Notify the Control Room x211 (radio Unite 1) if a spill or leak is discovered, do not transfer delivery to tank.

   B. Inspect the spill containment for cracks or other damage that could result in failure of the containment.

      1. Notify the Control Room (radio Unit 1) if any deformation is found. Do not transfer delivery to tank.

   C. Insure that spill clean up material is on hand in the Clinker Annex and in the delivery truck.

   D. Inspect the delivery hose to insure that it is free of obvious defects and be familiar with the pump controls on the truck in order to stop fuel transfer in case of an emergency.

2. During transfer operations, the company representative and the delivery truck driver will be present.

3. In case of a spill:

   A. Stop transfer of fuel,

   B. Notify the Control Room (radio Unit 1)

   C. Use spill cleanup material to contain product spill from spreading.

   D. If needed, additional skill kits are located:

      1. Group II silos at base of office stairs.

      2. Raw Mill Hydraulic Building.

      3. Receiving Dock.

      4. Finish Mill, SW corner first floor.

      5. Clinkler Annex.

      6. Burner Building – NW corner ground floor.

      7. Used Oil Storage Tanks.

DOCK CRANE HYDRAULIC OIL SPILL PROCEDURES

1. Prior to crane operation the following must be taken by the operator:
   A. Inspect the tank, pump and hose and hose connections for signs of leaks or damage. Do not operate if any defect is found, notify your supervisor.
   B. Inspect the reservoir basin for rainwater accumulation.
      1. Remove clean water by pumping into a clean container. Transport and discharge into the storm system.
      2. If water is contaminated, remove oil with skimmer pads, prior to pumping..
   C. Insure that spill clean up material is on hand on the dock.
2. In case of a spill:
   A. Turn off the hydraulic pump.
   B. Notify the Control Room x211 (radio Unit 1)
   C. Use spill cleanup material to contain product spill from spreading.
   D. If needed, additional skill kits are located:
      8. Group II silos at base of office stairs.
      9. Raw Mill Hydraulic Building.
      10. Receiving Dock.
      11. Finish Mill, SW corner first floor.
      12. Clinkler Annex.
      13. Burner Building – NW corner ground floor.
      14. Used Oil Storage Tanks.

RAW MILL HYDRAULIC OIL SPILL PROCEDURES

1. In case of a spill:

   A. Notify the Control Room x211 (radio Unit 1)

   B. Use spill cleanup material, soil or other readily available material to contain product spill from spreading.

   C. If needed, additional skill kits are located:

      15. Group II silos at base of office stairs.

      16. Raw Mill Hydraulic Building.

      17. Receiving Dock.

      18. Finish Mill, SW corner first floor.

      19. Clinkler Annex.

      20. Burner Building – NW corner ground floor.

      21. Used Oil Storage Tanks.

USED OIL HOLDING TANK PROCEDURES

1. Prior to transporting used oil to the holding tank the following action must be taken by the operator:

   B. Inspect the transfer container for defects such as corrosion or cracks which may allow material to leak. All transfer containers must be in good condition.

   C. Only used oil or lubricants that have been approved as "spec oil" may be transferred to the holding tanks.

2. Prior to transferring used oil into the tank the following action must be taken by the operator:

   A. Inspect the tank for evidence of leaks and corrosion.

   B. Inspect the delivery hose, pump and connections for defects. Report any found to your supervisor.

   C. Insure that holding tank spill kit is on hand and is ready for use.

   D. Insure that holding tank has sufficient space to contain the additional oil to prevent overfilling.

3. In case of a spill:

   A. Stop transfer

   B. Notify the Control Room (radio Unit 1)

   C. Use material in the spill kit to prevent spill from spreading.

   D. If needed, additional skill kits are located:

      1. Group II silos at base of office stairs.
      2. Raw Mill Hydraulic Building.
      3. Receiving Dock.
      4. Finish Mill, SW corner first floor.
      5. Clinkler Annex.
      6. Burner Building – NW corner ground floor.
      7. Used Oil Storage Tanks.

PORTABLE DIESEL TANK PROCEDURES

1. Prior to moving the tank the following action must be taken by the lift truck operator:
   A. Inspect the tank for evidence of leaks or corrosion.
   B. Inspect the delivery hose, pump and connections for defects. Report any found to your supervisor.
   C. Insure that tank spill kit is on hand and is transported along with the tank.
2. This tank is not to be taken:
   A. Within 250 feet of the waterfront,
   B. Near the storm drains at the north west corner of the Clinker Storage silos (see site map for drain locations)
   C. Near the wash rack basin near the Group II silos.
3. In case of a spill:
   A. Stop transfer.
   B. Notify the Control Room x211 (radio Unit 1)
   C. Use material in the spill kit to prevent spill from spreading.
   D. If needed, additional spill kits are located:
      1. Group II silos at base of office stairs.
      2. Raw Mill Hydraulic Building.
      3. Receiving Dock
      4. Finish Mill, SW corner first floor
      5. Clinkler Annex
      6. Burner Building – NW corner ground floor
      7. Used Oil Storage Tanks

APPENDIX F

INTERNAL/EXTERNAL EMERGENCY CONTACTS &

NOTIFICATION PROCEDURE

INTERNAL NOTIFICATION PROCEDURE

If an oil spill occurs, the Control Room must be notified and will respond according to the Plant Emergency Notification Procedures outlined below:

- By telephone: **Dial INT ext 211**

  By Radio: Request radio silence and call **UNIT 1**

- Identify your NAME and the LOCATION and NATURE of the Emergency
- Give assistance or start evacuation of the area. **DO NOT RISK YOUR SAFETY!**
- Dispatch a guide or meet and escort the arriving emergency response vehicles to the emergency scene
- If directed, begin plant evacuation. Unless dictate otherwise, the designated location where personnel are to gather is the **Main Gate Area.**

EXTRENAL AGENCY NOTIFICATION

When notified of an on-site emergency, Production Control will request emergency assistance from the appropriate agency (911 or Spill Response) and provide the following needed information:

- Identify yourself. (name & title)
- Identify plant address: **Ash Grove Cement Company**
  3801 East Marginal Way South
  Seattle, WA 98134
  Plant Telephone Number: 206.623.5596
- Identify the type and nature of the emergency.
- Instruct the responding personnel that an escort will meet the emergency vehicles at the main entrance
- Identify the exact location of the spill
- Provide any additional information regarding the emergency (Fire, chemical spill or release, identity of materials involved and estimated quantities, etc.).

ADDITIONAL AGENCY NOTIFICATION 24-HOUR EMERGENCY CONTACT PHONE NUMBERS

In case of a spill threatening the waterway:

Foss Environmental 24 Hour Notification: 206.767.0441

U.S. Coast Guard National Response Center: 1.800.424.8802

WA Department of Emergency Management 24 Hour Notification: 1.800.258.5990

In case of a spill threatening the METRO sewer system:

Foss Environmental 24 Hour Notification: 206.767.0441

METRO, West Point Treatment Plant 24 Hour Notification: 206.689.3801